

a¹

1. (Once Amended) An alternating current (AC) generator including an armature core having a plurality of teeth separated by intervening slots with a slot pitch, at least one multiphase winding disposed on said armature core, and a rotor disposed in said armature having a plurality of pairs of rotor poles and configured to rotate with a shaft, said shaft having an axis associated therewith, each pair respectively configured for energization in opposite magnetic polarity, said poles comprising a trapezoidal shape having a base, a leading side, a trailing side, and a tip side, said leading side having a plurality of portions in an axial direction, said trailing side is a straight line between the tip side and the base, wherein said leading side has a first portion extending from said tip side sloping at a first rate, said leading side having a second portion extending from said first portion sloping at a second rate less than said first rate.

3. (Once Amended) The AC generator of claim 1 wherein said first portion slopes between one and two slot pitches and said second portion slopes between one-half and one and one-half slot pitches.

4. (Once Amended) The AC generator of claim 3 wherein said first portion slopes one slot pitch, said second portion slopes about three-quarters slot pitch.

5. (Once Amended) The AC generator of claim 1 wherein said tip side is offset relative to said base, wherein said leading side has a first portion extending from said tip sloping at a first rate, said leading side having a second portion extending from said first portion sloping at a second rate less than said first rate.

6. (Once Amended) The AC generator of claim 5 wherein said first portion slopes between one and two slot pitches and said second portion slopes between one-half and one and one-half slot pitches.

7. (Once Amended) The AC generator of claim 6 wherein said first portion slopes one slot pitch, said second portion slopes three-quarters slot pitch.

a²

9. (Once Amended) An alternating current (AC) generator including an armature core having a plurality of teeth separated by intervening slots with a slot pitch, at least one multiphase winding disposed on said armature core, and a rotor disposed in said armature

09/900,248
DP-302,682

a3
cancel.

having a plurality of pairs of rotor poles and configured to rotate with a shaft, said shaft having an axis associated therewith, each pair respectively configured for energization in opposite magnetic polarity, said poles comprising a trapezoidal shape having a base, a leading side, a trailing side, and a tip side, said leading side having a plurality of portions in an axial direction, wherein said tip side is offset relative to said base, wherein said leading side has a first portion extending from said tip sloping at a first rate, said leading side having a second portion extending from said first portion sloping at a second rate less than said first rate, said first portion slopes between one and two slot pitches and said second portion slopes between one-half and one and one-half slot pitches, wherein said trapezoidal shape further includes a pair of shank portions extending from said base, said trailing side is a straight line in the axial direction between said tip side and one of said shank portions extending from said base.

a3

10. (New) The generator of claim 9 wherein said generator includes seventy-two teeth and six pairs of poles, said multiphase winding is a three-phase winding and wherein said trailing side is disposed at an incline relative to the axial extent of said teeth of said armature, said trailing side extending in parallel with said leading edge of an adjacent pole for a predetermined length.